

## Menthol and Smoking

Record - 1

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

14484207 22319787 PMID: 12432163

Mentholated cigarettes and smoking habits in whites and blacks.

Muscât J E; Richie J P; Stellman S D

American Health Foundation, Valhalla, New York 10595, USA.

jmuscat@ahf.org

Tobacco control (England) Dec 2002, 11 (4) p368-71, ISSN 0964-4563

Journal Code: 9209612

Contract/Grant No.: CA-17613; CA; NCI; CA-32617; CA; NCI; CA-68384; CA;

NCI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

OBJECTIVE: To determine if cigarette mentholation is associated with the frequency of smoking and with quitting, and whether mentholation explains racial differences in these two smoking behaviours. DESIGN: Cross sectional analysis of case-control data on smoking and lung cancer. SUBJECTS: Limited to 19 545 current and former cigarette smokers. MAIN OUTCOME MEASURES: Smoking > 20 cigarettes per day (cpd) versus < or = 20 cpd, and continued smoking versus quit smoking. RESULTS: Among blacks, the prevalence odds ratio (POR) of heavy smoking (> or = 21 cpd) associated with mentholated cigarettes versus non-mentholated cigarettes was 0.7 (95% confidence interval (CI) 0.5 to 0.9) in current smokers and 0.6 (95% CI 0.4 to 0.9) in former smokers. Among whites, the corresponding POR were 0.9 (95% CI 0.8 to 1.0) and 0.9 (95% CI 0.8 to 1.0). Blacks were less likely to have been heavy smokers than whites, but the difference was unrelated to cigarette mentholation. The POR of continued smoking versus quitting, associated with mentholated cigarettes was 1.1 (95% CI 1.0 to 1.2) for both blacks and whites. CONCLUSION: Smoking > 20 cpd was independently associated with white race. Among blacks, smoking < or = 20 cpd was independently associated with mentholated cigarettes. The risk of quitting was not associated with cigarette menthol flavour.

Record Date Created: 20021114

db

Record - 3

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

shelf  
SLW F

13184774 21618275 PMID: 11768188

Nicotine metabolism variability and nicotine addiction.

Ahijevych K

Ohio State University, College of Nursing, Columbus 43210, USA.

ahijevych.1@osu.edu

Nicotine & tobacco research : official journal of the Society for

Research on Nicotine and Tobacco (England) 1999, 1 Suppl 2 pS59-62;

discussion S69-70, ISSN 1462-2203 Journal Code: 9815751

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Individual variation in nicotine metabolism may play a role in a person's level of smoking, as well as in the transition from initiation to maintenance of a smoking behavior pattern. Since there is a paucity of research on nicotine metabolism in youth that smoke, a brief review of salient aspects of nicotine metabolism in adults provides a basis from which to extrapolate. We do know that factors influencing the rate of nicotine metabolism include differences in nicotine intake and absorption, inhalation patterns, genetic polymorphisms of pertinent enzymes, as well as daily activities such as meal consumption. Variability is illustrated with differences in cotinine levels identified in African-American and Caucasian women and in menthol and nonmenthol smokers. There are a number of areas where more information to improve understanding the initiation and maintenance of smoking behavior is needed. Characterization of nicotine metabolism and smoking topography in youth from multiple ethnic groups who are engaged in smoking initiation is currently lacking. Important measures of smoke constituent exposure such as carbon monoxide, nicotine and cotinine, as well as puff volume and duration and respiratory movements should be addressed. While there are numerous factors that impact initiation and maintenance of smoking behavior, nicotine metabolism may represent one important aspect.

Record Date Created: 20011220

PM3005219088

Record - 5

DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

10381134 99370926 PMID: 10442338

Women who smoke menthol cigarettes have greater nicotine exposure.  
Oncology (Williston Park, N.Y.) (UNITED STATES) Jul 1999, 13 (7)  
p915, ISSN 0890-9091 Journal Code: 8712059  
Document type: News  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed  
Record Date Created: 19990927

ASL  
54334  
F  
SLW

Record - 6

DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

10291457 99279870 PMID: 10353430

Little evidence that "denicotinized" menthol cigarettes have pharmacological effects: an EEG/heart-rate/subjective-response study.  
Pritchard W S; Houlihan M E; Guy T D; Robinson J H  
Psychophysiology Laboratory, Bowman Gray Technical Center 611-12, R.J. Reynolds Tobacco Company, Winston-Salem, NC 27102, USA. pritchw@rjrt.com  
Psychopharmacology (GERMANY) Apr 1999, 143 (3) p273-9, ISSN 0033-3158 Journal Code: 7608025  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed

**RATIONALE:** A substantial portion of cigarette smokers prefer menthol-flavored cigarettes. To date, however, no studies have examined whether menthol in cigarettes has central pharmacological effects. **OBJECTIVE:** We investigated psychophysiological and subjective effects of smoking menthol versus non-menthol cigarettes in both menthol and non-menthol smokers. To assess these effects independently of the immediate effects of nicotine, all cigarettes employed were "denicotinized" (FTC nicotine yield = 0.06 mg). **METHODS:** The psychophysiological measures were EEG and heart rate (HR). The subjective measures assessed mental alertness, muscular relaxation, anxiety/nervousness, and how much a participant wanted to smoke one of his usual brand of cigarettes. Menthol and non-menthol smokers participated in a single session in which each participant smoked both a menthol and a non-menthol denicotinized cigarette (order balanced across participants). The psychophysiological and subjective measures were recorded before and after smoking each cigarette. **RESULTS:** Out of 48 F-ratios spanning 22 analyses of variance involving the critical interaction between pre-/post-smoking and menthol/non-menthol cigarette, only one unambiguously fit a "pharmacological" pattern, a result indistinguishable from a type-I statistical error. We report evidence that menthol smokers may be chronically less aroused and more sensitive to the effects of nicotine than non-menthol smokers. **CONCLUSIONS:** We found little evidence that menthol in cigarettes has central pharmacological effects.

Record Date Created: 19990713

PM3005219089

Record - 8

DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

10177066 99155159 PMID: 10037555

Mentholated cigarette smoking and lung-cancer risk.

Carpenter C L; Jarvik M E; Morgenstern H; McCarthy W J; London S J

Department of Preventive Medicine, USC School of Medicine, Norris  
Comprehensive Cancer Center, Los Angeles, CA 90033, USA.

Annals of epidemiology (UNITED STATES) Feb 1999, 9 (2) p114-20,  
ISSN 1047-2797 Journal Code: 9100013

Contract/Grant No.: DA07272; DA; NIDA; N01-CN-25403; CN; NCI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**PURPOSE:** Menthol smoking may lead to a greater increase in lung-cancer risk than smoking of nonmentholated cigarettes. Mentholation of cigarettes adds additional carcinogenic components to cigarette smoke and increases retention times for cigarette smoke in the lungs. Only two epidemiologic studies have been conducted on menthol smoking and lung cancer, and their results are conflicting. Of note, African American males have much higher rates of lung cancer than Caucasian males despite smoking fewer cigarettes per day. Because the consumption of menthol cigarettes is much more frequent among African Americans, it is of interest to examine the possible association between menthol smoking and lung-cancer risk in this population. **METHODS:** We examined the association between menthol cigarette smoking and lung-cancer risk among smokers by comparing 337 incident cases of lung cancer with 478 population controls enrolled in a case-control study of lung cancer. Information on smoking history and other known and potential risk factors for lung cancer, including dietary intake, was obtained by in-person interviews. **RESULTS:** The adjusted odds ratios did not differ appreciably between smokers of mentholated cigarettes versus exclusive nonmentholated cigarette smokers in the overall study group of smokers. The odds ratio (OR) for 32 pack-years or more of mentholated vs. nonmentholated cigarettes was 0.90 (95% confidence interval (CI) = 0.38-2.12) in African Americans and 1.06 (95% CI = 0.47-2.36) in Caucasians, and did not differ for either ethnic group ( $p = 0.98$ ). **CONCLUSIONS:** Our results suggest that the lung-cancer risk from smoking mentholated cigarettes resembles the risk from smoking non-mentholated cigarettes. Our data do not support the hypothesis that the increased risk of lung cancer among African Americans is due to the increased prevalence of menthol smoking.

Record Date Created: 19990520

PM3005219090

Record - 11

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

09553629 97473918 PMID: 9332760

Differences in the urinary metabolites of the tobacco-specific lung carcinogen 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone in black and white smokers.

Richie J P; Carmella S G; Muscat J E; Scott D G; Akerkar S A; Hecht S S  
Division of Nutritional Carcinogenesis, American Health Foundation,  
Valhalla, New York 10595, USA. richie@nymc.edu

Cancer epidemiology, biomarkers & prevention : a publication of the  
American Association for Cancer Research, cosponsored by the American  
Society of Preventive Oncology (UNITED STATES) Oct 1997, 6 (10)  
p783-90, ISSN 1055-9965 Journal Code: 9200608

Contract/Grant No.: CA-17613; CA; NCI; CA-29580; CA; NCI; CA-32617; CA;  
NCI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Incidence and mortality rates for lung cancer in the United States are significantly greater in blacks than in whites. This disparity cannot be explained by differences in smoking behavior. We hypothesize that the observed racial differences in risk may be due to differences in the metabolic activation or detoxification of the tobacco-specific lung carcinogen 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK). To test this, different biomarkers of NNK exposure and metabolism, including the urinary metabolite 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanol (NNAL) and the presumed detoxification product [4-(methylnitrosamino)-1-(3-pyridyl)but-1-yl]-beta-O-D-glucosiduronic acid (NNAL-Gluc), were examined along with questionnaire data on lifestyle habits and diet in a metabolic epidemiological study of 34 black and 27 white healthy smokers. Results demonstrated that urinary NNAL-Gluc:NNAL ratios, a likely indicator of NNAL glucuronidation and detoxification, were significantly greater in whites than in blacks ( $P < 0.02$ ). In addition, two phenotypes were apparent by probit analysis representing poor (ratio  $< 6$ ) and extensive (ratio  $\geq 6$ ) glucuronidation groups. The proportion of blacks falling into the former, potentially high-risk group was significantly greater than that of whites ( $P < 0.05$ ). The absolute levels of urinary NNAL, NNAL-Gluc, and cotinine were also greater in blacks than in whites when adjusted for the number of cigarettes smoked. None of the observed racial differences could be explained by dissimilarities in exposure or other sociodemographic or dietary factors. Also, it is unlikely that the dissimilarities are due to racial differences in preference for mentholated cigarettes, because chronic administration of menthol to NNK-treated rats did not result in either increases in urinary total NNAL or decreases in NNAL-Gluc:NNAL ratios. Altogether, these results suggest that racial differences in NNAL glucuronidation, a putative detoxification pathway for NNK, may explain in part the observed differences in cancer risk.

Record Date Created: 19971118

PM3005219091

Record - 13

DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

APC  
5433 F  
52W

09390771 97288211 PMID: 9143194

African-American smokers and cancers of the lung and of the upper respiratory and digestive tracts. Is menthol part of the puzzle?

Richardson T L

Department of Internal Medicine, University of Colorado Health Sciences Center, Denver, USA.

Western journal of medicine (UNITED STATES) Mar 1997, 166 (3)  
p189-94, ISSN 0093-0415 Journal Code: 0410504

Document type: Journal Article; Review; Review Literature

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

The prevalence of cigarette smoking is higher among African Americans than among whites. African Americans have higher rates of lung cancer than whites, although they smoke fewer cigarettes. To explore this black-white difference in lung cancer rates, I examine various aspects of tobacco use in African-American smokers, including the age of initiation of smoking, quantity of cigarettes smoked, quit rates, level of nicotine dependence, biochemical differences, and brand preferences, specifically menthol brand cigarettes. I also review briefly the sequelae of patterns of tobacco use, including rates of lung and other tobacco-related cancers. A preference for mentholated cigarettes by African Americans is well documented and is one of the most striking differences between African-American and white smokers. Menthol brand preference has been investigated in an attempt to explain the black-white differences in rates of cancers of the lungs and the upper respiratory and digestive tracts. Also, studies have evaluated smoking behavior both with and without menthol and have explicitly examined the question of whether menthol use helps explain the black-white difference in lung cancer rates. The results of these studies are so far inconclusive with regard to the use of menthol and the risk of lung cancer developing. I provide practical suggestions for clinicians in counseling African-American smokers to quit smoking and to maintain a nonsmoking status. (44 Refs.)

Record Date Created: 19970702

PM3005219092

Record - 15

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

F

09164806 97072454 PMID: 8915220

Effect of menthol cigarettes on biochemical markers of smoke exposure among black and white smokers.

Clark P I; Gautam S; Gerson L W

Division of Cardiology, University of South Florida College of Medicine, Tampa, USA.

Chest (UNITED STATES) Nov 1996, 110 (5) p1194-8, ISSN 0012-3692

Journal Code: 0231335

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Phil SW

**STUDY OBJECTIVES:** Black smokers have been reported to have higher serum cotinine levels than do white smokers, and have higher rates of most smoking-related diseases, despite smoking fewer cigarettes per day. Another striking racial difference is the preference for mentholated cigarettes among black smokers. The contribution of menthol to variability in biochemical markers of cigarette smoke exposure (end-expiratory carbon monoxide and serum cotinine) was evaluated in a biracial sample. **DESIGN:** Descriptive cross-sectional. **SETTING:** A university smoking research laboratory. **PARTICIPANTS:** Sixty-five black and 96 white adult established smokers who were paid for their participation. **MEASUREMENTS:** Information was obtained through direct observation, self-report (interview and self-administered questionnaires), measurement of butts collected for a week, and laboratory analyses of the biochemical markers of exposure. **RESULTS:** Compared with the white smokers, the black smokers had significantly higher cotinine and carbon monoxide levels per cigarette smoked and per millimeter of smoked tobacco rod (both  $p < 0.001$ ). After adjusting for race, cigarettes per day, and mean amount of each cigarette smoked, menthol was associated with higher cotinine levels ( $p = 0.03$ ) and carbon monoxide concentrations ( $p = 0.02$ ). **CONCLUSIONS:** The use of menthol may be associated with increased health risks of smoking. Menthol use should be considered when biochemical markers of smoke exposure are used as quantitative measures of smoking intensity or as indicators of compliance with smoking reduction programs. In addition, the effect of menthol on total "dose" should be considered in any efforts to regulate the amount of nicotine in cigarettes.

Record Date Created: 19961219

PM3005219093

Record - 17

DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

08454993 95209509 PMID: 7695461

Mentholated cigarette use and lung cancer.

Sidney S; Tekawa I S; Friedman G D; Sadler M C; Tashkin D P

Division of Research, Kaiser Permanente Medical Care Program, Oakland, Calif.

Archives of internal medicine (UNITED STATES) Apr 10 1995, 155 (7)

p727-32, ISSN 0003-9926 Journal Code: 0372440

Contract/Grant No.: R35 CA 49761; CA; NCI; RO1 CA 36704; CA; NCI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

BACKGROUND: Menthol combustion produces carcinogenic compounds such as benzo[a]pyrenes. Mentholated cigarettes are much more commonly smoked by black individuals than by white individuals. The incidence of lung cancer is much higher (60%) in black men than in white men, but it differs little by race in women. We examined the association of mentholated cigarette use with lung cancer in men and women because mentholated cigarette use could help to explain the higher incidence rate of lung cancer in black men than in white men. METHODS: The study population consisted of 11,761 members of the Northern California Kaiser Permanente Medical Care Program, Oakland (5771 men and 3990 women), aged 30 to 89 years, who underwent a multiphasic health checkup in 1979 through 1985 and reported that they were current cigarette smokers who had smoked for at least 20 years. Data were collected about current cigarette brand, duration of mentholated cigarette use, and other smoking characteristics. Follow-up for incident lung cancer cases (n = 318) was carried out through 1991. RESULTS: The relative risk of lung cancer associated with mentholation compared with nonmentholated cigarettes was 1.45 in men (95% confidence interval, 1.03 to 2.02) and it was 0.75 in women (95% confidence interval, 0.51 to 1.11), adjusted for age, race, education, number of cigarettes smoked per day, and duration of smoking. Further adjustment for tar content and self-reported smoking intensity characteristics did not substantially alter the estimate of relative risk. A graded increase in risk of lung cancer with increasing duration of mentholated cigarette use was present in men. CONCLUSION: This study suggests that there is an increased risk of lung cancer associated with mentholated cigarette use in male smokers but not in female smokers.

Record Date Created: 19950427

APL  
54339  
SLW

f

PM3005219094



Record - 19

DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

08303437 95062629 PMID: 7972409

Mentholated cigarettes decrease puff volume of smoke and increase carbon monoxide absorption.

Jarvik M E; Tashkin D P; Caskey N H; McCarthy W J; Rosenblatt M R

Department of Psychiatry, School of Medicine, UCLA 90024.

Physiology & behavior (UNITED STATES) Sep 1994, 56 (3) p563-70,

ISSN 0031-9384 Journal Code: 0151504

Contract/Grant No.: NO-HR 46022; HR; NHLBI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

The influence of mentholated vs. regular cigarettes on selected chemical and topographic parameters was measured in 20 smokers in a pulmonary function laboratory. Half the subjects were black and half were white; half were menthol and half regular smokers. All subjects smoked both types of cigarettes, one on each of 2 days. Compared to regular cigarettes, mentholated cigarettes produced a significantly greater boost in carbon monoxide measured as both blood carboxyhemoglobin and end-expired carbon monoxide, despite the fact that mentholated cigarettes decreased average and total cumulative puff volumes and increased mean puff flow rates of inhaled smoke. These chemical and topographic differences were independent of race. No significant differences in depth of inhalation of the smoke or in the amount of insoluble smoke particulates delivered to or retained in the respiratory tract were noted between the two types of cigarettes. Mentholation of cigarettes may decrease volume of smoke inhaled but appears to increase exposure of smokers to toxic effects of carbon monoxide.

Record Date Created: 19941220

AIL  
54340  
96W  
F

PM3005219095

Record - 21

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

08077358 94227156 PMID: 8172993

Use of mentholated cigarettes and oropharyngeal cancer.

Kabat G C; Hebert J R

Division of Epidemiology, American Health Foundation, New York, NY.

Epidemiology (Cambridge, Mass.) (UNITED STATES) Mar 1994, 5 (2)  
p183-8, ISSN 1044-3983 Journal Code: 9009644

Contract/Grant No.: CA17613; CA; NCI; CA32617; CA; NCI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

We used data from a hospital-based case-control study of tobacco-related cancers to test the hypothesis that smoking mentholated cigarettes increases the risk of cancer of the oral cavity and pharynx, a cancer with a 50% higher incidence in black Americans compared with whites. Detailed information on smoking habits and other variables, obtained in personal interviews, was available for 194 male and 82 female newly diagnosed, histologically confirmed cases of oropharyngeal cancer and 845 male and 411 female controls, all of whom were current smokers. In univariate, stratified, and multivariable analyses involving all cases and controls, menthol was not a risk factor for cancer. The odds ratio, adjusted for covariates, for smoking mentholated cigarettes for  $\geq 15$  years relative to smoking nonmentholated cigarettes only was 0.9 (95% confidence interval = 0.5-1.6) in males, and 0.7 (95% confidence interval = 0.5-1.7) in females. In analyses by subsite, menthol use was positively associated only with cancer of the pharynx in males, although the magnitude of the association was small. These results indicate that use of mentholated cigarettes is unlikely to be an important independent factor in oropharyngeal cancer.

Record Date Created: 19940606

AKICF  
Seq 341  
SLW

PM3005219096

Record - 23

DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

07144059 92076377 PMID: 1742723

Use of mentholated cigarettes and lung cancer risk.

Kabat G C; Hebert J R

Division of Epidemiology, American Health Foundation, New York, New York  
10017.

Cancer research (UNITED STATES) Dec 15 1991, 51 (24) p6510-3, ISSN  
0008-5472 Journal Code: 2984705R

Contract/Grant No.: CA16713; CA; NCI; CA32617; CA; NCI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Black males have higher age-adjusted lung cancer incidence rates compared to white males, and blacks of both sexes have higher rates of increase in lung cancer incidence over past decades. The majority of black smokers smoke mentholated cigarettes. These observations prompted us to assess the effect of smoking mentholated cigarettes on lung cancer risk, using data from a hospital-based case-control study of tobacco-related cancers. Analysis was restricted to current cigarette smokers and was carried out on 588 male lung cancer cases and 914 male control patients and on 456 female lung cancer cases and 410 female controls interviewed between 1985 and 1990. The prevalence of menthol usage did not differ between cases and controls of either sex. No significant association was observed between either short-term (1-14 years) or long-term (15+ years) menthol use and lung cancer in logistic regression analyses adjusting for covariates. For specific histological types of lung cancer there was no indication of an association with menthol usage.

Record Date Created: 19920115

SLW  
micro  
F

PM3005219097

Record - 25

DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

06169542 89254249 PMID: 2722381

Menthol cigarette smoking and oesophageal cancer.

Hebert J R; Kabat G C

Division of Epidemiology, American Health Foundation, New York, NY 10017.

International journal of epidemiology (ENGLAND) Mar 1989, 18 (1)

p37-44, ISSN 0300-5771 Journal Code: 7802871

Contract/Grant No.: CA17613; CA; NCI; CA32617; CA; NCI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Oesophageal cancer incidence and mortality among American blacks is over three times the rate for whites. Between 1950 and 1977 the age-adjusted oesophageal cancer mortality rate approximately doubled in non-whites while remaining virtually unchanged in whites. Between World War II and the 1970s menthol cigarette sales dramatically increased, roughly paralleling the increase in oesophageal cancer among blacks. The present study uses existing data from a large hospital-based case-control study to test whether menthol cigarette smoking is related to oesophageal cancer. Oesophageal cancer cases were current smokers. Controls were matched to the cases on age (+/- 5 years) and sex, had conditions thought not to be related to tobacco use, and were also current smokers. Tabular analyses showed no change in risk for males ever-smoking menthol versus those never smoking menthol cigarettes. For women, however, there was an increased risk. Results of logistic regression analyses performed to account for potential confounding factors showed a marginally significant ( $P = 0.08$ ) decrease in risk among male short term (less than 10 years) menthol smokers versus male never-menthol smokers ( $OR = 0.50$ , 95% CI: 0.23-1.07) but no increased risk for menthol smoking of longer duration. Duration of menthol smoking fitted as a continuous variable showed no increased risk ( $P = 0.9$ ) after accounting for non-menthol cigarette smoking duration (about 2% per year increase,  $P = 0.02$ ). For females, the logistic analysis produced a marginally significant ( $P = 0.07$ ) increased risk for longer menthol use ( $OR = 2.30$ , 95% CI: 0.93-5.72). (ABSTRACT TRUNCATED AT 250 WORDS)

Record Date Created: 19890627

REC 54343  
SLW

(F)

PM3005219098

Record - 29

DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

01376220 72127296 PMID: 5010650

Successful treatment of habitual smokers with warm, smoky air and rapid smoking.

Schmahl D P; Lichtenstein E; Harris D E  
Journal of consulting and clinical psychology (UNITED STATES) Feb 1972,  
38 (1) p105-11, ISSN 0022-006X Journal Code: 0136553  
Document type: Clinical Trial; Journal Article; Randomized Controlled  
Trial

Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed  
Record Date Created: 19720511

Shalf SLW

Record - 30

DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

01321195 72070592 PMID: 5130259

[Glandular uranitis]  
L'ouranite glandulaire.  
Laugier P; Extermann J C; Micheau C; Reiffers J  
Dermatologica (SWITZERLAND) 1971, 142 (6) p344-52, ISSN 0011-9075  
Journal Code: 0211607  
Document type: Journal Article  
Languages: FRENCH  
Main Citation Owner: NLM  
Record type: Completed  
Record Date Created: 19720302

AFK

Record - 31

DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

00562029 68326421 PMID: 5662150

Benzo(a)pyrene, phenols and other products from pyrolysis of the  
cigarette additive, (d,1)-menthol.

Schmeltz I; Schlotzhauer W S  
Nature (ENGLAND) Jul 27 1968, 219 (5152) p370-1, ISSN 0028-0836  
Journal Code: 0410462

Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed  
Record Date Created: 19680905

mc rd SLW

PM3005219099

Record - 34

DIALOG(R)File 72:EMBASE  
(c) 2003 Elsevier Science B.V. All rts. reserv.

11884079 EMBASE No: 2002458254

What's new in Nicotine & Tobacco Research?

Hebert R.

Nicotine and Tobacco Research ( NICOTINE TOB. RES. ) (United Kingdom)

2002, 4/4 (385-388)

CODEN: NTREF ISSN: 1462-2203

DOCUMENT TYPE: Journal ; Note

LANGUAGE: ENGLISH

SHAF  
SLW

A

PM3005219100

DIALOG(R)File 72:EMBASE

(c) 2003 Elsevier Science B.V. All rts. reserv.

11419369 EMBASE No: 2001432467

Evaluation of the potential effects of ingredients added to cigarettes.

Part 3: In vitro genotoxicity and cytotoxicity

Roemer E.; Tewes F.J.; Meisgen T.J.; Veltel D.J.; Carmines E.L.

E. Roemer, INBIFO Inst. biologische Forschung, Fuggerstr. 3, D-51149 Koln  
Germany

AUTHOR EMAIL: roemer.ewald@pmintl.ch

Food and Chemical Toxicology ( FOOD CHEM. TOXICOL. ) (United Kingdom)

2002, 40/1 (105-111)

CODEN: FCTOD ISSN: 0278-6915

PUBLISHER ITEM IDENTIFIER: S0278691501000862

DOCUMENT TYPE: Journal ; Conference Paper

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 40

Cigarette mainstream smoke from blended cigarettes with and without the addition of ingredients was assayed for its cytotoxicity and genotoxicity. In total, 333 ingredients commonly used in cigarette manufacturing were assigned to three different groups. Each group of ingredients was added at a low and a high level to the test cigarettes. The mutagenicity of the particulate phase of the resulting cigarette smoke was assayed in the Salmonella plate incorporation (Ames) assay with tester strains TA98, TA100, TA102, TA1535 and TA1537. The cytotoxicity of the gas/vapor phase and the particulate phase was determined in the neutral red uptake assay with mouse embryo BALB/c 3T3 cells. Within the sensitivity and specificity of the test systems, the in vitro mutagenicity and cytotoxicity of the cigarette smoke were not increased by the addition of the ingredients. (c) 2001 Elsevier Science Ltd. All rights reserved.

f

SD

SLW

Record - 38

DIALOG(R)File 72:EMBASE  
(c) 2003 Elsevier Science B.V. All rts. reserv.

10818031 EMBASE No: 2000299596  
Aromatherapy: A systematic review  
Cooke B.; Ernst E.  
Prof. E. Ernst, Dept. of Complementary Medicine, Sch. of Postgrad.  
Med./Hlth. Sci., University of Exeter, 25 Victoria Park Road, Exeter EX2  
4NT United Kingdom  
British Journal of General Practice ( BR. J. GEN. PRACT. ) (United  
Kingdom) 2000, 50/455 (493-496)  
CODEN: BJGP E ISSN: 0960-1643  
DOCUMENT TYPE: Journal; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH  
NUMBER OF REFERENCES: 28

ALL

F

S 4349  
SHW

Aromatherapy is becoming increasingly popular; however there are few clear indications for its use. To systematically review the literature on aromatherapy in order to discover whether any clinical indication may be recommended for its use, computerised literature searches were performed to retrieve all randomised controlled trials of aromatherapy from the following databases: MEDLINE, EMBASE, British Nursing Index, CISCOR, and AMED. The methodological quality of the trials was assessed using the Jadad score. All trials were evaluated independently by both authors and data were extracted in a pre-defined, standardised fashion. Twelve trials were located: six of them had no independent replication; six related to the relaxing effects of aromatherapy combined with massage. These studies suggest that aromatherapy massage has a mild, transient anxiolytic effect. Based on a critical assessment of the six studies relating to relaxation, the effects of aromatherapy are probably not strong enough for it to be considered for the treatment of anxiety. The hypothesis that it is effective for any other indication is not supported by the findings of rigorous clinical trials.

PM3005219102



DIALOG(R)File 72:EMBASE

(c) 2003 Elsevier Science B.V. All rts. reserv.

07476488 EMBASE No: 1998388825

Rationale for cigarette smoking and for mentholation preference in cocaine- and nicotine-dependent outpatients

Wiseman E.J.; McMillan D.E.

Dr. E.J. Wiseman, Special Treatment Section, Little Rock Vet. Affairs

Med. Ctr., 4300 W 7th St, Little Rock, AR 72205 United States

Comprehensive Psychiatry ( COMPR. PSYCHIATRY ) (United States) 1998, 39/6 (358-363)

CODEN: COPYA ISSN: 0010-440X

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 23

We asked 43 cocaine- and nicotine-dependent outpatients at a substance abuse clinic their reasons for combining cocaine and cigarette use, and for preferring either mentholated or nonmentholated cigarettes. Responses to open-ended questions asked during a semistructured interview were categorized by an analysis of expressed motives for cigarette smoking. Responses that did not fit the categorization were analyzed separately in a qualitative design. Sedating, stimulating, or addictive effects were frequently stated as reasons for the combined use of cigarettes with cocaine. Sedating or calming effects of cigarette smoking included reduction of cocaine-induced paranoia. Cocaine- substituting and cocaine-enhancing effects of cigarette smoking were categorized as stimulating effects. Addictive effects included craving for cigarette smoking on its own or triggered by cocaine use. Sensorimotor or stimulating effects were frequently stated as reasons for a preference for mentholated or nonmentholated cigarettes. Sensorimotor effects of menthol included taste, anesthetic, cooling, and decongestant properties. Some responses provided by our patient sample suggest a need for research on the effect of cigarette smoking on absorption of smoked cocaine.

Record - 42

DIALOG(R)File 72:EMBASE  
(c) 2003 Elsevier Science B.V. All rts. reserv.

06742781 EMBASE No: 1997024254

Airway sensory replacement as a treatment for smoking cessation

Westman E.C.; Behm F.M.; Rose J.E.

Dr. J.E. Rose, Nicotine Research Laboratory (151-S), VA Medical Center,  
508 Fulton Street, Durham, NC 27705 United States

Drug Development Research ( DRUG DEV. RES. ) (United States) 1996,  
38/3-4 (257-262)

CODEN: DDRED ISSN: 0272-4391

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 23

Although nicotine may be a necessary component of the smoking addiction, it is obvious even to the non-expert that there is far more to smoking than the delivery of nicotine alone. Among the many aspects of smoking that smokers find pleasurable, 60% of smokers report liking of the feeling of cigarette smoke in the throat and chest. This paper summarizes several studies that strongly suggest that the airway sensations of smoking are important for at least the short-term satisfaction and craving reduction of cigarette smoking, and that these sensations can be reproduced by several other substances than cigarette smoke. Airway sensory replacement, especially in combination with nicotine replacement, may fill one of the many gaps that currently exist in smoking cessation treatment.

APC  
59391  
SW  
F

PM3005219104

Record - 43

DIALOG(R)File 72:EMBASE

(c) 2003 Elsevier Science B.V. All rts. reserv.

06095767 EMBASE No: 1995126367

Minerva

British Medical Journal ( BR. MED. J. ) (United Kingdom) 1995, 310/6986  
(1080)

CODEN: BMJOA ISSN: 0959-8146

DOCUMENT TYPE: Journal; Note

LANGUAGE: ENGLISH

PM3005219105

f  
DIALOG(R)File 72:EMBASE  
(c) 2003 Elsevier Science B.V. All rts. reserv.

10790040 EMBASE No: 2000270335

Smoking reduction with oral nicotine inhalers: Double blind, randomised clinical trial of efficacy and safety

Bolliger C.T.; Zellweger J.-P.; Danielsson T.; Van Biljon X.; Robidou A.; Westin A.; Perruchoud A.P.; Sawe U.

C.T. Bolliger, Respiratory Division, Dept. of Internal Medicine,  
University Hospital, 4031 Basle Switzerland

AUTHOR EMAIL: ctb@gerga.sun.ac.za

British Medical Journal ( BR. MED. J. ) (United Kingdom) 05 AUG 2000,  
321/7257 (329-333)

CODEN: BMJOA ISSN: 0959-8146

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 17

Objectives. To determine whether use of an oral nicotine inhaler can result in long term reduction in smoking and whether concomitant use of nicotine replacement and smoking is safe. Design. Double blind, randomised, placebo controlled trial. Four months trial with a two year follow up. Setting. Two university hospital pulmonary clinics in Switzerland. Participants. 400 healthy volunteers, recruited through newspaper advertisements, willing to reduce their smoking but unable or unwilling to stop smoking immediately. Intervention. Active or placebo inhaler as needed for up to 18 months, with participants encouraged to limit their smoking as much as possible. Main outcome measures. Number of cigarettes smoked per day from week six to end point. Decrease verified by a measurement at baseline. Results. At four months sustained reduction of smoking was achieved in 52 (26%) participants in the active group and 18 (9%) in the placebo group ( $P < 0.001$ ; Fisher's test). Corresponding figures after two years were 19 (9.5%) and 6 (3.0%) ( $P = 0.012$ ). Conclusions. Nicotine inhalers effectively and safely achieved sustained reduction in smoking over 24 months. Reduction with or without nicotine substitution may be a feasible first step towards smoking cessation in people not able or not willing to stop abruptly.

DIALOG(R)File 72:EMBASE

(c) 2003 Elsevier Science B.V. All rts. reserv.

11419368 EMBASE No: 2001432466

Evaluation of the potential effects of ingredients added to cigarettes.

Part 2: Chemical composition of mainstream smoke

Rustemeier K.; Stabbert R.; Haussmann H.-J.; Roemer E.; Carmines E.L.

K. Rustemeier, INBIFO Inst. biologische Forschung, Fuggerstr.3, D-51149

Koln Germany

AUTHOR EMAIL: rustemeier.klaus@pmintl.ch

Food and Chemical Toxicology ( FOOD CHEM. TOXICOL. ) (United Kingdom)

2002, 40/1 (93-104)

CODEN: FCTOD ISSN: 0278-6915

PUBLISHER ITEM IDENTIFIER: S0278691501000850

DOCUMENT TYPE: Journal ; Conference Paper

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 57

Cigarette mainstream smoke from blended research cigarettes with and without the addition of ingredients was analyzed for its chemical composition. In total, 333 ingredients commonly used in cigarette manufacturing were assigned to three different groups. Each group of ingredients was introduced at a low and a high level to the test cigarettes. The list of the 51 smoke constituents determined is based on those analytes suggested for analysis in a US Consumer Product Safety Commission proposal for low ignition cigarettes and cigarette smoke constituents identified by the International Agency for Research on Cancer as worthy of concern and characterized as carcinogens. An increase in the yield of total particulate matter (TPM) in the range of 13 to 28% relative to the control cigarette without ingredients was observed for all test cigarettes. This was presumably caused by the higher transfer rates of the added ingredients to the smoke compared to the transfer from the tobacco part of the filler. When the yields of individual constituents were normalized to the TPM yields, a reduction in the majority of the constituents was observed when compared to the control. For one of the ingredient groups this reduction was especially high: for phenols a maximum of 70%, for polycyclic aromatic hydrocarbons 50%, and for N-nitrosamines 45%. An increase in the amount relative to TPM was observed for a few smoke constituents: hydrogen cyanide and cadmium (one ingredient group), formaldehyde (one ingredient group), and resorcinol and lead (two ingredient groups). These results are consistent with the lack of any increased activity in the in vitro and in vivo assays in this same series of studies (Food and Chemical Toxicology 2002, 40, 105-111; Food and Chemical Toxicology 2002, 40, 113-131). An overall assessment of our data suggests that these ingredients, when added to the tobacco, do not add to the toxicity of smoke, even at the elevated levels tested in this series of studies. (c) 2001 Elsevier Science Ltd. All rights reserved.

DIALOG(R)File 72:EMBASE

(c) 2003 Elsevier Science B.V. All rts. reserv.

F 11421014 EMBASE No: 2001435352

Evaluation of the potential effects of ingredients added to cigarettes.

Part 4: Subchronic inhalation toxicity

Vanschœuwijck P.M.; Teredesai A.; Terpstra P.M.; Verbeeck J.; Kuhl P.;

Gerstenberg B.; Gebel S.; Carmines E.L.

P.M. Vanschœuwijck, CRC Contract Research Center, Tollan 101c, B-1932

Zaventem Belgium

AUTHOR EMAIL: Vanschœuwijck.Patrick@pmintl.ch

Food and Chemical Toxicology ( FOOD CHEM. TOXICOL. ) (United Kingdom)

2002, 40/1 (113-131)

CODEN: FCTOD ISSN: 0278-6915

PUBLISHER ITEM IDENTIFIER: S0278691501000898

DOCUMENT TYPE: Journal ; Conference Paper

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 51

SD  
SHW

Mainstream smoke from blended research cigarettes with (test) and without (control) the addition of ingredients to the tobacco was assayed for inhalation toxicity. In total, 333 ingredients commonly used in cigarette manufacturing were assigned to three different groups. Each group of ingredients was introduced at a low and a high level to the test cigarettes. Male and female Sprague-Dawley rats were exposed nose-only either to fresh air (sham) or diluted mainstream smoke from the test, the control, or the Reference Cigarette 1R4F at a concentration of 150 mug total particulate matter/l for 90 days, 6 h/day, 7 days/week. A 42-day post-inhalation period was included to evaluate reversibility of possible findings. There were no remarkable differences in in-life observations or gross pathology between test and control groups. An increase in activity of liver enzymes, known to be due to the high smoke dose, revealed no toxicologically relevant differences between the test and control groups. No toxicological differences were seen between the test and control groups for smoke-related hematological changes, such as a decrease in total leukocyte count. The basic smoke-related histopathological effects, which were more pronounced in the upper respiratory tract than in the lower respiratory tract, were hyperplasia and squamous metaplasia of the respiratory epithelium, squamous metaplasia and atrophy of the olfactory epithelium, and accumulation of pigmented alveolar macrophages. There were no relevant qualitative or quantitative differences in findings in the respiratory tract of the rats exposed to the smoke from the control and test cigarettes. The data indicate that the addition of these 333 commonly used ingredients, added to cigarettes in three groups, did not increase the inhalation toxicity of the smoke, even at the exaggerated levels used. (c) 2001 Elsevier Science Ltd. All rights reserved.

Record - 32

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

F 00211186 66144252 PMID: 5938225

Menthol urticaria.

McGowan E M

Archives of dermatology (UNITED STATES) Jul 1966, 94 (1) p62-3,  
ISSN 0003-987X Journal Code: 0372433

Document type: Journal Article

ASL Languages: ENGLISH

S 0347 Main Citation Owner: NLM

SLW Record type: Completed

Record Date Created: 19660902

Record - 33

DIALOG(R)File 72:EMBASE

(c) 2003 Elsevier Science B.V. All rts. reserv.

F 11884083 EMBASE No: 2002458258

Factors influencing cotinine half-life during smoking abstinence in  
African American and Caucasian women

Shelf Ahijevych K.L.; Tyndale R.F.; Dhath R.K.; Weed H.G.; Browning K.K.

SLW K. Ahijevych, Ohio State University, College of Medicine/Public Health,  
1585 Neil Avenue, Columbus, OH 43210 United States

AUTHOR EMAIL: ahijevych.1@osu.edu

Nicotine and Tobacco Research ( NICOTINE TOB. RES. ) (United Kingdom)  
2002, 4/4 (423-431)

DOCUMENT TYPE: Journal ; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 40

Cotinine, the proximate metabolite of nicotine, has been identified as an indicator of smoke constituent exposure. Higher cotinine levels in African American cigarette smokers have been identified. Because African Americans experience disproportionate smoking-related morbidity and mortality, it is important to examine potential factors influencing these higher levels of cotinine. The current study examined selected factors of ethnicity, menthol cigarette preference, body composition and alcohol-use history on cotinine half-life in 6 days of smoking abstinence in African American and Caucasian women. A 7-day inpatient protocol was conducted in the General Clinical Research Center, in which day 1 was ad lib smoking and days 2-7 were smoking abstinence (n = 32). Plasma cotinine was measured every 8 h throughout. Average cotinine half-life was 21.3 h, similar to previously reported 18-20 h. Three women exhibited >14 ng/ml cotinine after 136 h of smoking abstinence. Host factors explaining 52.0% of variance in cotinine half-life and associated with longer half-life were being an African American menthol smoker, fewer years of alcohol use and greater lean body mass. Among menthol smokers, baseline cotinine level and cotinine half-life were not significantly different in Caucasian and African American women. Intra-individual cotinine half-life variation and CYP2A6 genotype were examined in substudies. To improve accuracy in correctly classifying non-smokers with cotinine levels, a period of at least 7 days of smoking abstinence may be warranted.

PM3005219109

Record - 26

f DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

AKC  
59344  
SLW  
05841189 88267364 PMID: 3389443  
Menthol cigarettes and esophageal cancer.  
Hebert J R; Kabat G C  
American journal of public health (UNITED STATES) Aug 1988, 78 (8)  
p986-7, ISSN 0090-0036 Journal Code: 1254074  
Document type: Letter  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed  
Record Date Created: 19880811

Record - 27

DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

f  
AKC  
59345  
SLW  
02890469 78213887 PMID: 668352  
Menthol dermatitis from cigarettes.  
Camarasa G; Alomar A  
Contact dermatitis (DENMARK) Jun 1978, 4 (3) p169-70, ISSN  
0105-1873 Journal Code: 7604950  
Document type: Letter  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed  
Record Date Created: 19780929

Record - 28

AKC  
S  
59346  
SLW  
DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2003 The Dialog Corp. All rts. reserv.

02803580 78122786 PMID: 629559  
Menthol and dermatitis.  
Chrisman B B  
Archives of dermatology (UNITED STATES) Feb 1978, 114 (2) p286,  
ISSN 0003-987X Journal Code: 0372433  
Document type: Letter  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed  
Record Date Created: 19780426

PM3005219110



Record - 24

F DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

ATC 06306292 89390791 PMID: 2782516

Mentholated cigarette use among multiphasic examinees, 1979-86.

Sy 342 Sidney S; Tekawa I; Friedman G D

SLW Division of Research, Kaiser Permanente Medical Care Program, Oakland, CA 94611.

American Journal of public health (UNITED STATES) Oct 1989, 79 (10)

p1415-6, ISSN 0090-0036 Journal Code: 1254074

Contract/Grant No.: CA36074-04; CA; NCI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Mentholated cigarette use was studied in relation to age and race in 29,037 current smokers who were Kaiser Permanente Medical Care Program members. The percentages of mentholated cigarette users were much higher in Blacks and Asians than in Whites, especially in the younger age groups. A marked inverse relationship between mentholated cigarette use and age was present in Blacks and Asians; mentholated cigarette use showed little difference with age in Whites.

Record Date Created: 19891025

PM3005219111

Record - 22

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

07954963 94089778 PMID: 8265679

Rapid smoking of menthol and nonmenthol cigarettes by black and white smokers.

Caskey N H; Jarvik M E; McCarthy W J; Rosenblatt M R; Gross T M; Carpenter C L

Department of Psychiatry and Biobehavioral Sciences, School of Medicine, UCLA 90073.

Pharmacology, biochemistry, and behavior (UNITED STATES) Oct 1993, 46

(2) p259-63, ISSN 0091-3057 Journal Code: 0367050

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

White subjects took significantly more puffs of cigarette smoke before stopping than did black subjects in a modified, controlled-dose rapid smoking procedure. Paradoxically, however, no racial differences were detected for changes in carbon monoxide levels, or changes in cardiovascular variables (systolic and diastolic blood pressure, and heart rate). Due to the cooling and topical anesthetic properties of menthol, it was hypothesized that menthol and regular cigarette smokers would take more puffs from menthol cigarettes than from regular cigarettes before stopping in the controlled-dose rapid smoking procedure. However, no difference was observed for the number of puffs taken from regular as opposed to menthol cigarettes (cigarette type condition) and no differences were found for Cigarette Preference (regular smokers vs. menthol smokers).

Record Date Created: 19940127

PM3005219112

Record - 20

db  
DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

08172759 94307114 PMID: 8033760

Inhalation of vapor from black pepper extract reduces smoking withdrawal symptoms.

Rose J E; Behm F M

Nicotine Research Laboratory (151-S), V.A. Medical Center, Durham, NC 27705.

Drug and alcohol dependence (IRELAND) Feb 1994, 34 (3) p225-9, ISSN 0376-8716 Journal Code: 7513587

Document type: Clinical Trial; Journal Article; Randomized Controlled Trial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Previous studies have suggested that sensory cues associated with cigarette smoking can suppress certain smoking withdrawal symptoms, including craving for cigarettes. In this study we investigated the subjective effects of a cigarette substitute delivering a vapor of black pepper essential oil. Forty-eight cigarette smokers participated in a 3-h session conducted after overnight deprivation from smoking. Subjects were randomly assigned to one of three conditions: one group of smokers puffed on a device that delivered a vapor from essential oil of black pepper; a second group puffed on the device with a mint/menthol cartridge, and a third group used a device containing an empty cartridge. Subjects puffed and inhaled ad libitum from the device throughout the session during which no smoking was allowed. Reported craving for cigarettes was significantly reduced in the pepper condition relative to each of the two control conditions. In addition, negative affect and somatic symptoms of anxiety were alleviated in the pepper condition relative to the unflavored placebo. The intensity of sensations in the chest was also significantly higher for the pepper condition. These results support the view that respiratory tract sensations are important in alleviating smoking withdrawal symptoms. Cigarette substitutes delivering pepper constituents may prove useful in smoking cessation treatment.

Record Date Created: 19940812

PM3005219113

Record - 18

215  
DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

08392821 95133660 PMID: 7832264

Menthol vs nonmenthol cigarettes: effects on smoking behavior.

McCarthy W J; Caskey N H; Jarvik M E; Gross T M; Rosenblatt M R;  
Carpenter C

Department of Psychology, University of California, Los Angeles (UCLA)  
90024-1563.

American journal of public health (UNITED STATES) Jan 1995, 85 (1)  
p67-72, ISSN 0090-0036 Journal Code: 1254074

Document type: Clinical Trial; Controlled Clinical Trial; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**OBJECTIVES.** The purpose of this study was to examine intraindividual differences in smoking behavior between smoking regular and mentholated cigarettes. **METHODS.** Healthy male smokers ( $n = 29$ ) smoked either a regular or a mentholated cigarette in two separate sessions 1 week apart. Commercial brands with comparable tar, nicotine, and CO content were used. Smoking behavior was constrained by fixed 15-second interpuff intervals, but puff volume and number of puffs were unconstrained. **RESULTS.** When smoking the non-mentholated brand of cigarettes, participants smoked 22% more puffs and had 13% higher mean volumes per puff than they did when smoking the mentholated brand of cigarettes. The aggregate 39% excess exposure to cigarette smoke in the regular-cigarette condition was not accompanied by commensurate excesses in expired carbon monoxide or in physiological measures normally correlated with nicotine exposure. **CONCLUSIONS.** These findings parallel differences in physiological correlates of exposure to nicotine found in cross-sectional comparisons of African-American and White smokers and are consistent with the results of emerging laboratory investigations.

Record Date Created: 19950223

PM3005219114

Record - 16

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

09066730 96403866 PMID: 8808144

Menthol and nonmenthol cigarettes and smoke exposure in black and white women.

Ahijevych K; Gillespie J; Demirci M; Jagadeesh J

College of Nursing, Ohio State University, Columbus, USA.

Pharmacology, biochemistry, and behavior (UNITED STATES) Feb 1996, 53

(2) p355-60, ISSN 0091-3057 Journal Code: 0367050

Document type: Clinical Trial; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Purposes of this investigation were to compare smoke constituent exposure (CO and nicotine boosts) and smoking topography parameters between black and white women, and between women regularly using menthol or nonmenthol cigarettes. A two-factor factorial design with a sample of 37 women stratified by race and menthol or nonmenthol cigarette use was implemented. There were significant main and interaction effects of race and menthol/nonmenthol use on CO boost. Black women had a mean CO boost of 10.1 ppm vs. 7.2 ppm for white women, while women using nonmenthol cigarettes had a higher CO boost (mean = 10.6 ppm) compared to those regularly using menthol cigarettes mean = 6.5 ppm). White menthol smokers had the lowest CO boost of all subgroups. There was a trend for black women to have higher nicotine boost than white women (21.4 ng/ml vs. 15.9 ng/ml). Black women had nonsignificantly higher puff volumes compared to white women (mean = 48.4 vs. 43.5 ml), while nonmenthol smokers had nonsignificantly higher puff volumes than menthol smokers (mean = 48.5 vs. 42.7 ml). Lower CO boost with mentholated cigarettes suggests factors beyond mentholation may affect elevated smoke constituent exposure among black women.

Record Date Created: 19970116

PM3005219115

Record - 14

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

09342299 97249160 PMID: 9119925

Menthol cigarette use in African Americans.

Richardson T

Department of Internal Medicine, University of Colorado Health Sciences Center, Denver, USA.

Hospital practice (Office ed.) (UNITED STATES) Aug 15 1996, 31 (8)

p22H-22I, ISSN 8750-2836 Journal Code: 8404149

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Record Date Created: 19970424

PM3005219116

Record - 12

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

09541481 97447201 PMID: 9301652

13-week inhalation toxicity study of menthol cigarette smoke.

Gaworski C L; Dozier M M; Gerhart J M; Rajendran N; Brennecke L H; Aranyi C; Heck J D

Lorillard Tobacco Co., Greensboro, NC 27420-1688, USA.

Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association (ENGLAND) Jul 1997, 35 (7) p683-92, ISSN 0278-6915 Journal Code: 8207483

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Menthol is a common pharmaceutical, food and tobacco flavouring ingredient used for its minty characteristics and cooling effects. A 13-wk comparative nose-only smoke inhalation toxicity study was conducted using an American-style, cellulose acetate-filtered, non-menthol reference cigarette and a similarly blended test cigarette containing 5000 ppm synthetic 1-menthol tobacco. Male and female Fischer 344 rats were exposed for 1 hr/day, 5 days/wk for 13 wk at target mainstream smoke particulate concentrations of 200, 600 or 1200 mg/m<sup>3</sup>, while control rats were exposed to filtered air. Internal dose biomarkers (blood carboxyhaemoglobin, serum nicotine and serum cotinine) indicated equivalent exposures were obtained for the two cigarettes. Effects typically noted in rats exposed to high levels of mainstream tobacco smoke were similar for both cigarette types and included reduced body weights (males slightly more affected than females), increased heart-to-body weight ratios and lung weights, and histopathological changes in the respiratory tract. Rats exposed to reference cigarette smoke displayed a dose-related increase in nasal discharge that was not observed in menthol smoke-exposed rats. All smoke-related effects diminished significantly during a 6-wk non-exposure recovery period. The results of this 13-wk smoke inhalation study indicated that the addition of 5000 ppm menthol to tobacco had no substantial effect on the character or extent of the biological responses normally associated with inhalation of mainstream cigarette smoke in rats.

Record Date Created: 19971010

PM3005219117

Record - 9

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

10120108 99093253 PMID: 9877426

Olfactory thresholds for nicotine and menthol in smokers (abstinent and nonabstinent) and nonsmokers.

Rosenblatt M R; Olmstead R E; Iwamoto-Schaap P N; Jarvik M E

School of Medicine, University of California, Los Angeles 90024, USA.

Physiology & behavior (UNITED STATES) Dec 1 1998, 65 (3) p575-9,  
ISSN 0031-9384 Journal Code: 0151504

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Nonsmokers and smokers were compared for olfactory sensitivity to two odors associated with cigarettes: nicotine and menthol. Smokers were tested twice--while nonabstinent, and after 16-20 h of smoking abstinence. Smokers showed a higher olfactory threshold for nicotine than did nonsmokers, but the same threshold for menthol. Furthermore, when the smokers were abstinent, they showed a lower olfactory threshold for nicotine than when they were nonabstinent, but again, the same threshold for menthol. These results suggest a nicotine specific olfactory deficit in smokers that is reduced during abstinence.

Record Date Created: 19990517

Record - 10

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

09833353 98279400 PMID: 9616428

Mentholated cigarettes and non-lung smoking related cancers in California, USA.

Friedman G D; Sadler M; Tekawa I S; Sidney S

Division of Research, Kaiser Permanente Medical Care Program, Oakland, CA 94611, USA.

Journal of epidemiology and community health (ENGLAND) Mar 1998, 52 (3) p202, ISSN 0143-005X Journal Code: 7909766

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Record Date Created: 19980625

PM3005219118



Record - 7

F DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

10235501 99205976 PMID: 10189978

Smoke constituent exposure and stage of change in black and white women cigarette smokers.

Ahijevych K; Parsley L A

Ohio State University, College of Nursing, Columbus 43210, USA.

ahijevych.1@osu.edu

Addictive behaviors (ENGLAND) Jan-Feb 1999, 24 (1) p115-20, ISSN

0306-4603 Journal Code: 7603486

Contract/Grant No.: M01 RR00034; RR; NCRR

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Differences in smoke constituent exposure by ethnicity and menthol preference and differences in decisional balance and habit strength by stage of change, ethnicity, and menthol preference were examined in this 2-factor study design. Ninety-five women, half of whom were Black and half of who smoked menthol cigarettes, participated in a cigarette smoking bout in the Clinical Research Center. Measures of smoking topography, plasma cotinine and nicotine, and expired carbon monoxide were obtained in addition to self-report of the pros and cons of smoking, time to first cigarette, and smoking history. Black women smoked significantly fewer cigarettes per day, but had higher cotinine levels compared to White women. Menthol smokers (n = 49) had significantly larger puff volumes, higher cotinine levels, and shorter time to first cigarette compared to nonmenthol smokers (n = 46). Precontemplators (n = 44) were significantly lower on beliefs about the negative aspects of smoking compared to contemplators and those in preparation stage. Black women, all stages combined, had higher negative beliefs about smoking than did White women. Implications for assessment of smoking patterns and intervention are discussed.

Record Date Created: 19990615

PM3005219119

f shelf SHW  
Record - 4

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

13010250 21671863 PMID: 11812507

Sensory and physiologic effects of menthol and non-menthol cigarettes with differing nicotine delivery.

Pickworth Wallace B; Moolchan Eric T; Berlin Ivan; Murty Ram

Clinical Pharmacology Branch, National Institute on Drug Abuse, Intramural Research Program, Addiction Research Center, National Institutes of Health, PO Box 5180, Baltimore, MD 21224, USA.

wpickwo@intra.nida.nih.gov

Pharmacology, biochemistry, and behavior (United States) Jan-Feb 2002, 71 (1-2) p55-61, ISSN 0091-3057 Journal Code: 0367050

Document type: Clinical Trial; Journal Article; Randomized Controlled Trial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Many smokers choose menthol-flavored cigarettes, however, the influence of menthol on the effects of smoke-delivered nicotine is unknown. Research and commercial cigarettes, menthol and non-menthol, that delivered a wide range of nicotine were evaluated. Menthol (n=18) and non-menthol (n=18) cigarette smokers participated in a single session during which three cigarettes were smoked 45 min apart, in random order. Federal Trade Commission (FTC) nicotine yields of the three cigarettes were: research, low yield, 0.2 mg, commercial cigarettes (average), 1.2 mg; research, high yield, 2.5 mg. Commercial and high-yield cigarettes increased heart rate (HR) and blood pressure more than low-yield cigarettes; although, no differences in exhaled carbon monoxide (CO) occurred. Participants smoked commercial cigarettes faster and with fewer puffs than either of the research cigarette indicating production differences can affect topography. There was a significant group by cigarette interaction on satisfaction, and relief from cigarette craving. High-yield non-menthol cigarettes reduced craving and were rated as more satisfying than high-yield menthol cigarettes. No differences between menthol and non-menthol cigarettes on other subjective measures (strength, psychological reward, negative effects) were observed. Our findings indicate that nicotine delivery, but not mentholation, influences cardiovascular and most subjective measures. These results illustrate the importance of threshold levels of nicotine on subjective responses to cigarette smoking.

Record Date Created: 20020128

PM3005219120

Record - 2

ebcco SHW f

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

13481696 22031005 PMID: 12035007

Mentholated cigarettes and smoking cessation: findings from COMMIT.  
Community Intervention Trial for Smoking Cessation.

Hyland A; Garten S; Giovino G A; Cummings K M

Roswell Park Cancer Institute, Department of Cancer Prevention,  
Epidemiology, and Biostatistics, Buffalo, New York 14263, USA.  
andrew.hyland@roswellpark.org

Tobacco control (England) Jun 2002, 11 (2) p135-9, ISSN 0964-4563  
Journal Code: 9209612

Contract/Grant No.: CA16056-26; CA; NCI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**OBJECTIVE:** To examine the association between the use of menthol cigarettes and smoking cessation, amount smoked, and time to first cigarette in the morning. **BACKGROUND:** The majority of African American smokers smoke mentholated cigarettes. Some evidence suggests that African Americans may be more nicotine dependent than whites. One theory is that menthol in cigarettes is responsible for enhancing the dependence producing capacity of cigarettes; however, few studies have prospectively examined the association between menthol use and indicators of nicotine dependence. **METHODS:** Baseline smokers from the Community Intervention Trial for Smoking Cessation (COMMIT) completed a telephone tobacco use survey in 1988 and were re-interviewed in 1993. Use of mentholated cigarettes was assessed by self report at baseline. Indicators of dependence examined were six month cessation in 1993, amount smoked among continuing smokers in 1993, and time to first cigarette in the morning in 1988. Multivariate regression techniques were used to assess the association of baseline menthol use with these outcomes while controlling for other factors related to dependence. **RESULTS:** Overall, 24% of the sample smoked a mentholated brand in 1988. No consistent associations were observed for menthol use and indicators of dependence in both overall and race specific analyses. Factors significantly associated with increased menthol use were female sex, age 25-34 years, African American and Asian race/ethnicity, greater education, greater than 60 minutes to the first cigarette in the morning, two or more past quit attempts, and use of premium brand cigarettes. Canadian respondents and those who smoked 15-24 cigarettes per day had lower rates of menthol use. Use of mentholated cigarettes was not associated with quitting, amount smoked, or time to first cigarette in the morning. **CONCLUSION:** Future work is needed to clarify the physiological and sociocultural mechanisms involved in mentholated cigarette smoking.

Record Date Created: 20020529

PM3005219121